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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,255	08/26/2003	Gerard Vergnaud	Q76973	3044

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EXAMINER	
KEEFER, MICHAEL E	

ART UNIT	PAPER NUMBER
2154	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/647,255	VERGNAUD ET AL.	
	Examiner	Art Unit	
	Michael E. Keefer	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 April 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-44* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-44* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is responsive to the Amendment filed 4/25/2007.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-16, 21-23, 25, and 27-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagen (US 2002/0075844 A1) and Schneider et al. (US 6408336 B1) hereafter Schneider.

Regarding **claims 1 and 28** Hagen discloses:

A processing server (Network Access Server 7, Fig. 1) for allocating user terminals (user terminal 1, Fig. 1) resources of a local area network (LAN 10, Fig. 1), which server is adapted to be connected to at least one local area network access point (connection 8, WAPs 3,4, Fig. 1) and is characterized in that it includes control means adapted:

i) (Hagen groups terminals into at least two groups, one set of groupings being those MAC addresses who are located in the database, and those MAC addresses who are not located in the database. See [0052])

ii) to allocate resources of said local area network to terminals attempting to establish communication therewith as a function of whether they are classified in said first group or said second group. ([0051], lines 1-3)

Regarding **claims 2-3 and 29 as applied to claims 1 and 28** Hagen discloses:

said control means are adapted to: determine the MAC address of each terminal attempting to establish communication with said local area network (Page 4, Col. 1, lines 7-9 disclose that the NAS retrieves the MAC address from the client from a packet.)

and in that it includes means for allocating an IP address to the terminal having the MAC address determined in this way. ([0066] "The NAS router-related services preferably include ... DHCP/DHCP Relay services")

Regarding **claims 4 and 30 as applied to claims 1-2 and 28-29**, Hagen discloses:

a memory for storing a table containing primary MAC addresses associated with first terminals adapted to exchange data frames encrypted in accordance with said format. (Page 4, Col. 1, Lines 9-12, the NAS inherently has memory for storing the database)

Regarding **claims 5 and 31 and as applied to claims 1-2, 4 and 28-30**, Hagen discloses:

said table contains secondary MAC addresses associated with second terminals (8b) adapted to exchange unencrypted data frames. ([0050] describes how the MAC address is used to look up all of the permissions a terminal is allowed.)

Regarding **claims 6 and 32 and as applied to claims 1-2, 4-5 and 28-30**, Hagen discloses:

said control means (II) are adapted to determine if a MAC address extracted from a received frame is a primary or secondary MAC address and, if so, to send the allocation means (12) a request to allocate the terminal (8b) corresponding to said primary or secondary MAC address a primary IP address so that it can set up a link with at least one first remote network and one second remote network ([0158] If the mobile terminal's MAC address is found in the database, it obtains an IP address assignment for the mobile terminal, and can communicate on the private LAN or on the Internet)

and, if not, to send the allocation means (12) a request to allocate the terminal (8c) corresponding to said MAC address, referred to as a third terminal, a secondary IP address so that it can set up a connection with at least one second remote terminal. ([0052] if the MAC address is not located in any database, it is assigned a temporary IP address; [0158] If the mobile terminal's MAC address is found in the database, it obtains an IP address assignment for the mobile terminal. [0107] lines 27-28 state that unregistered users may be given some kind of network access, i.e. being allowed to connect to a second remote terminal)

Regarding **claims 7 and 33 as applied to claims 1-2, 4 and 28-30**, Hagen discloses:

said first terminals are associated with said first remote network. (Note Fig. 13, where first terminals are private users 23)

Regarding **claim 8 and 34 as applied to claims 1-2, 4, 7, 28-30 and 33** Hagen discloses:

said terminals (8b) belong to known users of said first remote network. ([0107] states that one of the user terminal groupings is that of "home or local users" who are clients of the service providers private network, thus, the terminal belongs to a user of the first remote network.)

Regarding **claims 9 and 35 as applied to claims 1-2, 4, 6, 28-30, and 32** Hagen discloses:

each first remote network is selected from the group comprising private networks, IP data networks, and public switched telephone networks (PSTN), and in that each second remote network is selected from the group comprising IP data networks and public switched telephone networks (PSTN). (Fig. 13, Note the private LAN, the PSTN and the internet, an IP network)

Regarding **claims 10 and 36 as applied to claims 1 and 28**, Hagen discloses:

said control means (ii) are adapted to allocate at least two priority levels for allocation of resources of the local area network (WLAN) according to whether communications are encrypted in accordance with said chosen format or not. ([0097] BAM handles queuing between public access subscribers and private network clients, and also the allocation and throttling of bandwidth for public access subscribers and private network clients.)

Regarding **claims 11 and 37 as applied to claims 1, 10, 28, and 36**, Hagen discloses:

the MAC addresses in said table are stored in corresponding relationship to at least one priority level. (Fig. 2 shows the contents of the table, which can be different for each MAC address, included wherein is policy table 3500, which provides for items like Bandwidth Policy.)

Regarding **claims 12 and 38 and as applied to claims 1, 10-11, 28, and 36-37**, Hagen discloses:

said priority levels comprise at least one first priority level allocated to first terminals (8a) associated with primary MAC addresses and one second priority level allocated to second terminals (8b) associated with secondary MAC addresses. (it is disclosed that specifically public access subscribers and private network clients could have two separate levels of priority in [0097].)

Regarding **claims 13 and 39 as applied to claims 1, 10-12, 28, and 36-38** Hagen discloses:

said control means (ii) are adapted to allocate a third priority level for allocation of resources of the local area network to said third terminals (8c) setting up communications not encrypted in accordance with said chosen format and whose MAC address is not in said table. (Third terminals whose address are not in the table are allocated a priority, as shown in lines 5-8 as "unregistered users".)

Regarding **claims 14 and 40 as applied to claims 1, 10-11, 28, and 36**, Hagen discloses:

said priority levels apply at least to a bandwidth and said bandwidth decreases from the first level to the third level. ([0107] gives a greatest to least list of bandwidth allocation classes in lines 5-8.)

Regarding **claims 15 and 41 as applied to claims 1, 10-11, 14, 28, 36, and 40**, Hagen discloses:

said control means (ii) send said access point (I) data representative of said bandwidth assigned to a designated terminal (8) and said access point allocates the corresponding resources to said designated terminal. (In [0185], it is disclosed in lines 11-14 that if the NAS is not the router, the NAS must update the QoS parameters on the router.)

Regarding **claims 16 and 42 as applied to claims 1, 10, 28, 36, and 40-41**, Hagen discloses:

said control means (Ii) are adapted to modify an allocated priority level as a function of the available resources of said local area network (WLAN). (Page 12 Col 2, lines 15-20)

Regarding **claim 21 and as applied to claim 1**, Hagen discloses:

A router, characterized in that it includes a processing server according to claim 1. (In [0185] lines 11-12, states "If the NAS is not the router...", which implies that the NAS can be a router.)

Regarding **claim 22 and as applied to claim 1**, Hagen discloses:

A local area network access point, characterized in that it includes a processing server according to claim 1. ([0054] discloses that the NAS may be implemented as a stand-alone device or as part of a WAP)

Regarding **claim 23 and as applied to claim 1**, Hagen discloses:

A communication installation including at least one local area network accessible via at least one access point, at least one first remote network, and at least one second remote network, which installation is characterized in that it includes a processing server according to claim 1 connected to said access point and to said first and second remote networks. (See Fig. 1, Note that LAN 10 is accessible via the NAS from the access point; note that the NAS is connected to the access point and the Internet and the Telephone ISDN/PSTN).

Regarding **claim 25 and as applied to claim 23**, Hagen discloses:

said processing server is connected to said first remote network via a virtual private network. (In [0217] and [0218] Hagen discloses that the connection to other networks may be encrypted using IPSec, or IPSec tunnels (i.e. VPN).)

Regarding **claim 26 and as applied to claim 23**, Hagen discloses:

said processing server is connected to said first remote network via a remote access server. (In [0217] and [0218] Hagen discloses that the connection to other networks may be enabled by RADIUS or DIAMETER (i.e. remote access services, which would need a remote access server to connect to.).)

Regarding **claim 27 and as applied to claim 23**, Hagen discloses:

each first remote network is chosen from the group comprising private networks, IP data networks, and public switched telephone networks (PSTN) and in that each second remote network is selected from the group comprising IP data networks and public switched telephone networks (PSTN). (See Fig. 1, the internet is an IP network, and the PSTN is a PSTN network.)

Regarding **claim 43 as applied to claim 28**, Hagen discloses:

Use of a method according to claim 28 in communication networks selected from the group comprising PSTN, PLMN and Internet (IP) public networks and PABX private networks and private communication gateways.

Regarding **claim 44 as applied to claims 28 and 43**, Hagen discloses:

Use according to claim 43, characterized in that the PLMN public networks are mobile networks selected from the group comprising GSM, GPRS and UMTS networks.

Therefore, Hagen discloses all the limitations of claims 1-16, 21-23, and 27-42 except for the terminals being classified according to their ability to use encryption.

The general concept of classifying network clients according to their security traits is well known in the art as taught by Schneider (which teaches in Col 10 lines 6-34 that in order for a client to be able to access a network resource it must meet or exceed the trust (or encryption) level of that resource).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hagen with the teaching of terminals being classified according to

their security traits as taught by Schneider in order to make the system more scalable (Schneider, Col. 5 line 66).

3. Claims 17-20 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagen and Schneider as applied to claims 1 and 23 above, and further in view of Comer, "Internetworking with TCP/IP Vol. 1".

Regarding **claims 17-18**,

Hagen discloses that The NAS includes components necessary to connect to the network, including a third conventional network interface provided for connecting to the private network (LAN) 10. ([0062] lines 7-16)

Hagen and Schneider disclose all of the limitations of claims 17-18 except that a cabled interface is used as the third conventional network interface, and in specific, Ethernet.

The general concept of using a cabled Ethernet network interface to a LAN is well known in the art as taught by Comer. (see page 20, under heading 2.4, "Ethernet has become the most popular LAN technology", also note Fig. 2.1 which shows a cable that can be used to implement Ethernet).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the network access control system of Hagen and Schneider to include the general concept of using a cabled Ethernet network interface as taught by Comer in order to be compatible with most private networks.

Regarding **claims 19-20**,

Hagen discloses that radio link technology used in the system disclosed is based upon IEEE 802.11b. ([0039] lines 1-2)

Hagen and Schneider disclose all the limitations of claims 19 and 20 except that a radio link is used to interface with the LAN.

The general concept of wirelessly accessing a LAN is well known in the art as taught by Comer. (Section 2.11.5 teaches that a wide variety of radio link equipment is available to create wireless LANs.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the network access control system of Hagen and Schneider to include the general concept of using a radio link network interface as taught by Comer in order to be compatible with more private networks.

Regarding **claim 24**,

Hagen and Schneider disclose all the limitations of claim 24 except that said local area network is a wireless local area network.

The general concept of a LAN being wireless is well-known in the art as taught by Comer (Section 2.11.5 teaches the possibility of creating a wireless LAN).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the network access control system of Hagen and Schneider to include the general concept of a LAN being wireless as taught by Comer in order to service a more diverse set of private LANs.

4. Claims 43-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagen and Schneider.

Regarding **claims 43-44**,

Hagen and Schneider discloses all the limitations of claims 43-44 as cited above except for specific use of the method in PSTN, PLMN, IP, and PABX private networks and private communication gateways.

The general concept of limiting access to networks is well-known in the art, and PSTN, PLMN, IP, and PABX private networks and private communication gateways are well-known networks in the art, and that GSM, GPRS, and UMTS are well-known types of PLMN networks and official notice is taken as such.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the network access limiting method of Hagen and Schneider with the fact that PSTN, PLMN, IP, and PABX private networks and private communication gateways are networks that may need to have access limited in order to secure a more diverse group of networks.

Response to Arguments

5. Applicant's arguments filed 4/25/2007 have been fully considered but they are not persuasive.

Summary Of Applicant's Arguments

1) Applicant requests that the objection to the specification be withdrawn in view of the substitute specification and amended abstract.

2) Applicant requests that the objections to the claims be withdrawn.

3) Applicant argues that the rejection of claims 1-20 and 28-44 under 35 U.S.C. 101 be withdrawn.

4) Applicant argues that the rejection of claims 43-44 under 35 U.S.C. 112 be withdrawn.

5) Applicant argues that the motivation to combine Hagen and Schneider is too vague and general to support a prima facie case of obviousness in the rejection of claims 1-16, 21-23, 25, 27-42, and 43-44 under 35 U.S.C. 103(a). Applicant makes similar arguments about the rejections of claims 17-20 and 24 under 25 U.S.C. 103(a) over Hagen, Schneider and Comer.

Response to Arguments

1) The argument is moot because the Examiner has withdrawn the objections to the specification.

2) The argument is moot because the Examiner has withdrawn the objections to the claims.

3) The arguments are moot because the Examiner has withdrawn the rejection of the claims.

4) The argument is moot because the Examiner has withdrawn the rejection of the claims.

5) Schneider Col. 5, lines 61-63 explicitly state a need for access filters that do not present the above problems for scalability implying that the systems and methods that are taught solve this known problem. Scalability is a well-known desire in

networking access systems so as to be able to accommodate more users, network traffic, or additional networks. Included in the scalability is the ability to accept or deny requests for network resources (i.e. transport over the network) as noted in the above rejection of the claims 1-16, 21-23, 25, and 27-42 above, so as to be able to filter requests based off of additional criteria, i.e. making the filtering system more scalable.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael E. Keefer whose telephone number is (571) 270-1591. The examiner can normally be reached on Monday-Thursday 5:30am-3pm, second Fridays 5:30am-2pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MEK 6/6/2007

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